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51016 7590 11/06/2007 IBM CORP. (RALEIGH SOFTWARE GROUP) c/o Rudolf O Siegesmund Gordon & Rees, LLP 2100 Ross Avenue Suite 2800 DALLAS, TX 75201			EXAMINER ARCOS, CAROLINE H	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/761,184

Applicant(s)

AYACHITULA ET AL.

Examiner

Caroline Arcos

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 01-20-2004 and 11-08-2006.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

1. Claims 1-32 are pending for examination.

***Specification***

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o).

Correction of the following is required: Claims 13- 24 refer to a "computer usable medium" which is not defined in the specification.

***Claim Rejections - 35 USC § 101***

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 25-32 is rejected under 35 U.S.C 101 because the claimed invention is directed to non-statutory subject matter.
5. Claims 25-32 are rejected under 35 U.S.C. 101 because the claimed invention is directed to apparatus, but appearing to be comprised of software alone without claiming associated computer hardware required for execution and the computerized processing (system) was not defined in the specification to include

computer hardware. The following link on the World Wide Web is for the United States Patent and Trademark Office (USPTO) policy on 35 USC § 101.

<[http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101\\_20051026.pdf](http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101_20051026.pdf)>

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

7. Claims 1-4, 6,8 and 13-16 are rejected under 35 U.S.C. 102(a) as being anticipated by S.Jha ("Java implementation of policy-based bandwidth management", 07/2003, International Journal of network management, pages 249-258).
8. As per claim 1, S.Jha teaches the invention as claimed including a method for allocating a plurality of resources to a plurality of applications (Page 255, right col., lines 8, 11; Page 255, right col., lines 27-31), the method comprising:

configuring a system with a resource allocation program (Page 253, BBI, right col., lines 27-29; Page 254, Right col., lines 3-4).

wherein the resource allocation program performs steps comprising:

determining whether one of the applications has requested the resources (Page 255, left col., lines 5-7);

responsive to the determination that one of the applications has requested the resources, determining a policy (Page 255, right col., lines 8-11)

associated with the application using a policy allocation table (Page 250, right col. lines 20-25);

responsive to the determination of the policy (Page 255, right col., lines 8-10)

associated with the application determining a resource allocation associated with the policy using a resource allocation table (Page 255, right col., lines 8-10); and

responsive to the determination of the resource allocation associated with the policy allocating a portion of the resources to the application based on the resource allocation associated with the policy (page 254, right col., lines 3-4; Page 255, right col., lines 24-25).

9. As per claim 2, S.Jha teaches the policy is one of a plurality of policies;

determining if a user wants to define at least one of the policies (page 255, right col., lines 28-31); and

responsive to the determination that the user wants to define the policies (page 255, right col., lines 9-10; page 255, right col., lines 30-31), accepting a user definition, modification or deletion of at least one of the policies in a resource allocation table (page 255, right col., lines 10-11; page 255, right col., lines 39-40).

10. As per claim 3, S.Jha teaches determining if a user wants to assign the policies to the applications (page 249, right col. Lines 11-13); and

responsive to the determination that the user wants to assign the policies to the applications, accepting a user assignment (Page 255, right col. Lines 14-15; page 255, lines 28-31), modification ((Page 255, right col. Lines 24-27), or deletion (page 250, right col., lines 17-19) of at least one of the associations between the policies and the applications in a resource allocation table.

11. As per claim 4, S.Jha teaches each of the applications is associated with one of a plurality of customers (Page 250, right col., lines 27-32); and

wherein the resource allocation program allocates the resources to the applications based upon the policy associated with the application and independent of the status of the customers associated with the applications (Page 253, right col., lines 38-40).

12. As per claim 6, S.Jha teaches the resource allocation program allocates all of the currently available resources to the application, subject to the limitations (page

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254, right col., lines 3-4) defined in resource allocation table for the policy associated with the application (Page 255, right col., lines- 24-25).

13. As per claim 8, S.Jha teaches the system is a computer network (Page 249, left col., lines 1-3).

14. As per claims 13-16, they are the program product claims of claims 1-4 respectively. Therefore, they are rejected for the same reason as claims 1-4 above.

***Claim Rejections - 35 USC § 103***

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over S.Jha "Java implementation of policy-based bandwidth management", 07/2003, International Journal of network management, pages 249-258).

17. As per claim 9, S.Jha did not teach that the system is a computer file. However, S.Jha teaches that the system is a computer network that can exchange millions of computer files between or outside the network.

18. It could have been obvious to one of ordinary skill in the art to include computer files in S.Jha's system because it improves the efficiency of information access and exchange.

19. As per claim 10, S.Jha did not teach that the system is a computer operating system. However, S.Jha teaches that the system is a computer network that is based on a computer operating system.

20. It could have been obvious to one of ordinary skill in the art to include a computer operating system in S.Jha's system because it improves the efficiency of task scheduling.

21. As per claim 11, S.Jha did not teach that the system is a computer program. However, S.Jha teaches that the system is a computer network that access computer programs.

22. It could have been obvious to one of ordinary skill in the art to include a computer program in S.Jha's system because it improves computer resources



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management and access.

23. Claims 5, 17, 18, 20-23, 25-26 and 28-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over S.Jha "Java implementation of policy-based bandwidth management", 07/2003, International Journal of network management, pages 249-258), in view of Chang Ho Choi et Al. (Chang) Adaptive bandwidth reservation mechanism using mobility probability in mobile multimedia computing environment", 2000, pages 76-85).

24. As per claim 5, S. Jha did not teach that a consistent quality of service is achieved for substantially all of the applications associated with each policy.

25. However, Chang teaches that a consistent quality of service is achieved for substantially all of the applications associated with each policy (Page 76, right col., lines 1-4; page 76, right col., lines 16-19).

26. It would be obvious to one of an ordinary skill in the art at the time the invention was made to have combined the teaching of S. Jha and Chang because Chang's teaching provides consistent quality of service of all application associated with each policy that improve the workload throughout the network.

27. As per claims 17-18, they are the program product claims of claims 5-6 respectively. Therefore, they are rejected for the same reason as claims 5-6 above.

28. As per claims 20-23, they are the program product claims of claims 8-11 respectively. Therefore, they are rejected for the same reason as claims 8-11 above.

29. As per claim 25, S. Jha teaches an apparatus for allocating a plurality of resources to a plurality of applications (Page 255, right col., lines 8, 11; Page 255, right col., lines 27-31) the apparatus comprising:

means for determining if a user wants to define at least one of a plurality of policies (page 255, right col., lines 28-31);

responsive to the determination that the user wants to define at least one of the policies (page 255, right col., lines 9-10; page 255, right col., lines 30-31), means for accepting a user definition, modification, or deletion of at least one of the policies in a resource allocation table (page 255, right col., lines 10-15; page 255, right col., lines 39-40).;

means for determining if a user wants to assign the policies to the applications (page 249, right col. Lines 11-13);

responsive to the determination that the user wants to assign the policies to the applications, means for accepting a user assignment (Page 255, right col.

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Lines 14-15; page 255, lines 28-31), modification (Page 255, right col. Lines 24-27), or deletion (page 250, right col., lines 17-19) of at least one of the associations between the policies and the applications in a resource allocation table;

means for determining whether one of the applications has requested the resources (Page 255, left col., lines 5-7); responsive to the determination that one of the applications has requested the resources, means for determining the policy (Page 255, right col., lines 8-11) associated with the application using a policy allocation table (Page 250, right col. lines 20-25);

responsive to the determination of the policy (Page 255, right col., lines 8-10) associated with the application, means for determining a resource allocation associated with the policy using a resource allocation table (Page 255, right col., lines 8-10);

responsive to the determination of the resource allocation associated with the policy, means for allocating a portion of the resources to the application based on the resource allocation associated with the policy (page 254, right col., lines 3-4; Page 255, right col., lines 24-25);

wherein each of the applications is associated with one of a plurality of customers (Page 250, right col., lines 27-32);

wherein the resource allocation program allocates the resources to the applications based upon the policy associated with the application and independent of the status of the customers associated with the applications (Page

253, right col., lines 38-40).

30. S. Jha did not teach a consistent quality of service is achieved for substantially all of the applications associated with each policy.

31. However, Chang teaches that a consistent quality of service is achieved for substantially all of the applications associated with each policy (Page 76, right col., lines 1-4; page 76, right col., lines 16-19).

32. As per claim 26, it is the program product claim of claim 6. Therefore, it is rejected for the same reason as claim 6 above.

33. As per claims 28-31, they are the apparatus claims of claims 8-11 respectively. Therefore, they are rejected for the same reason as claim 8-11 above.

34. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over S.Jha ("Java implementation of policy-based bandwidth management", 07/2003, International Journal of network management, pages 249-258), in view of Terje K. Backman et Al. (Terje) (US 7,137,119 B1).

35. As per claim 7. S.Jha teaches the invention as claimed in claim 1. S.Jha did not teach that the resource allocation program waits until the amount of resource defined in the resource allocation table are available, and then the resource

allocation program allocates the entire amount of resources defined in the resource allocation table for the policy to the application.

36. However, Terje teaches that the resource allocation program (Resource manager) waits until the amount of resources defined in the resource allocation table are available, and then the resource allocation program allocates the entire amount of resources defined in the resource allocation table for the policy to the application. (Column 10, lines 42-46).

37. It would be obvious to one of an ordinary skill in the art at the time the invention was made to have combined the teaching of S. Jha and Terje because Terje 's teaching improve the efficiency of resource management and the quality of service throughout the network.

38. Claims 19 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over S.Jha ("Java implementation of policy-based bandwidth management", 07/2003, International Journal of network management, pages 249-258), in view of Chang Ho Choi et Al. (Chang) Adaptive bandwidth reservation mechanism using mobility probability in mobile multimedia computing environment", 2000, pages 76-85), and further in view of Terje K. Backman et Al. (Terje) (US 7,137,119 B1).

39. As per claim 19, S.Jha and Chang did not teach that the resource allocation program waits until the amount of resource defined in the resource allocation table are available, and then the resource allocation program allocates the entire amount of resources defined in the resource allocation table for the policy to the application.

40. However, Terje teaches the resource allocation program waits until the amount of resources defined in the resource allocation table are available, and then the resource allocation program allocates the entire amount of resources defined in the resource allocation table for the policy to the application (Column 10, lines 42-46).

41. It would be obvious to one of an ordinary skill in the art at the time the invention was made to have combined the teaching of S.Jha, Chang and Terje because Terje 's teaching improve the efficiency of resource management, scheduling techniques and the quality of service throughout the network.

42. As per claim 27, it is the apparatus claim of claim 7. Therefore, it is rejected for the same reason as claim 7 above.

43. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over S.Jha ("Java implementation of policy-based bandwidth management", 07/2003,

International Journal of network management, pages 249-258), in view of Naik et al. (Naik) (US 2006/0294238 A1).

44. As per claim 12. S.Jha did not teach that wherein the system is a virtual machine. However, Naik teaches that the system is a virtual machine (140, Figure 2).
45. It would be obvious to one of an ordinary skill in the art at the time the invention was made to have combined the teaching of S. Jha and Naik because Naik 's teaching to allow us to perform resource allocation on multiple different machines which will improve scheduling techniques.
46. Claims, 24 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over S.Jha ("Java implementation of policy-based bandwidth management", 07/2003, International Journal of network management, pages 249-258), in view of Chang Ho Choi et Al. (Chang) Adaptive bandwidth reservation mechanism using mobility probability in mobile multimedia computing environment", 2000, pages 76-85), and further in view of Naik et al. (Naik) (US 2006/0294238 A1).
47. As per claims 24, S.Jha and Chang did not teach that the system is a virtual machine. However, Naik teaches that the system is a virtual machine.

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48. It would be obvious to one of an ordinary skill in the art at the time the invention was made to have combined the teaching of S. Jha, Chang and Naik because Naik 's teaching to allow us to perform resource allocation on multiple different machines which will improve scheduling techniques in S.Jha and Chang 's system.

49. As per claim 32, it is the apparatus claim of claim 12. Therefore, it is rejected for the same reason as claim 12 above.

***Claim Rejections - 35 USC § 102***

50. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

51. Claims 1-4, 6,8,10,12, and 13-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Naik et al. (Naik) (US 2006/0294238 A1).



52. As per claim 1, Naik teaches a method for allocating a plurality of resources to a plurality of applications (Page 3, paragraph [0032], lines 1-3) the method comprising:

configuring a system with a resource allocation program;

wherein the resource allocation program performs steps comprising:

determining whether one of the applications (page 4, paragraph [0062], lines 1-2) has requested the resources (page 2, paragraph [0024], lines 1-3);

responsive to the determination that one of the applications has requested the resources, determining a policy associated with the application using a policy allocation table ((Page 2, paragraph [0024], lines 1-3; Page 5, paragraph [0075], lines 3-9);

responsive to the determination of the policy associated with the application, determining a resource allocation associated with the policy using a resource allocation table (Page 6, Paragraph [0078], lines 1-5); and

responsive to the determination of the resource allocation associated with the policy (page 5, paragraph [0068], lines 3-6; page 5, paragraph [0068], lines 12-13) allocating a portion of the resources to the application based on the resource allocation associated with the policy (Page 6, Paragraph [0078], lines 5-9).

53. As per claim 2, Naik teaches the policy is one of a plurality of policies;

determining if a user wants to define at least one of the policies (Page 6, paragraph [0088], lines 1-5); and

responsive to the determination that the user wants to define the policies accepting a user definition, modification or deletion of at least one of the policies in a resource allocation table (Page 6, paragraph [0077], lines 1-5).

54. As per claim 3, Naik teaches determining if a user wants to assign the policies to the applications; and

responsive to the determination that the user wants to assign the policies to the applications, accepting a user assignment, modification, or deletion of at least one of the associations between the policies and the applications in a resource allocation table (Page 6, paragraph [0077], lines 1-5).

55. As per claim 4, Naik teaches each of the applications is associated with one of a plurality of customers (page 4, paragraph [0062], lines 2-4); and

wherein the resource allocation program allocates the resources to the applications based upon the policy associated with the application and independent of the status of the customers associated with the applications (Page 3, paragraph [0033], lines 1-4).

56. As per claim 6, Naik teaches the resource allocation program allocates all of the currently available resources to the application subject (Page 3, paragraph [0030], lines 6-7) to the limitations defined in resource allocation table for the

policy associated with the application (Page 2, paragraph [0024], lines 4-6).

57. As per claim 8, Naik teaches the system is a computer network (10, Figure 1).

58. As per claim 10, Naik teaches the system is a computer operating system (110, Figure 2).

59. As per claim 12, Naik teaches the system is a virtual machine (140, Figure 2).

60. As per claims 13-16, they are the program product claims of claims 1-4 respectively. Therefore, they are rejected for the same reason as claims 1-4 above.

### ***Claim Rejections - 35 USC § 103***

61. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

62. Claims 9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naik et al. (Naik) (US 2006/0294238 A1).

63. As per claim 9, Naik did not teach that the system is a computer file. However, Naik teaches that the system is a computer network in a grid system.

64. It could have been obvious to one of ordinary skill in the art to include computer files in Naik's system because it improves the efficiency of information access and exchange.

65. As per claim 11, Naik did not teach that the system is a computer program. However, Naik teaches that the system is a computer network in a grid system sharing the same resources.

66. It could have been obvious to one of ordinary skill in the art to include a computer program in Naik's system because it improves management and access of computer resources and improve efficiency of resource scheduling techniques.

67. Claims 5, 17, 18, 20-24, 25-26 and 28-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naik et al. (Naik) (US 2006/0294238 A1), in view of Chang Ho Choi et Al. (Chang) ("Adaptive bandwidth reservation mechanism using mobility probability in mobile multimedia computing environment", 2000, pages 76-85).

68. As per claim 5, Naik did not specially teach that a consistent quality of service is achieved for substantially all of the applications associated with each policy.

69. However, Chang teaches that a consistent quality of service is achieved for substantially all of the applications associated with each policy (left col., lines 1-4; right col., lines 16-19).

70. It would be obvious to one of an ordinary skill in the art at the time the invention was made to have combined the teaching of Naik and Chang because Chang's teaching provides consistent quality of service of all application associated with each policy would improve the management of proper workload throughout the network.

71. As per claims 17- 18, they are the program product claims of claims 5-6 respectively. Therefore, they are rejected for the same reason as claims 5-6 above.

72. As per claims 20-24, they are the program product claims of claims 8-12 respectively. Therefore, they are rejected for the same reason as claims 8-12 above.

73. As per claim 25, Naik teaches an apparatus for allocating a plurality of resources to a plurality of applications (Page 3, paragraph [0032], lines 1-3), the apparatus comprising:

means for determining if a user wants to define at least one of a plurality of policies (Page 6, paragraph [0077], lines 1-5);

responsive to the determination that the user wants to define at least one of the policies (Page 6, paragraph [0088], lines 1-5), means for accepting a user definition, modification, or deletion of at least one of the policies in a resource allocation table (Page 6, paragraph [0077], lines 1-5);

means for determining if a user wants to assign the policies to the applications;

responsive to the determination that the user wants to assign the policies to the applications, means for accepting a user assignment, modification, or deletion of at least one of the associations between the policies and the applications in a resource allocation table (Page 6, paragraph [0077], lines 1-5);

means for determining whether one of the applications has requested the resources (page 2, paragraph [0024], lines 1-3; page 4, paragraph [0062], lines 1-4);

responsive to the determination that one of the applications has requested the resources, means for determining the policy associated with the application using a policy allocation table (Page 2, paragraph [0024], lines 1-3; Page 5, paragraph [0075], lines 3-9);

responsive to the determination of the policy associated with the

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application, means for determining a resource allocation associated with the policy using a resource allocation table (Page 6, Paragraph [0078], lines 1-5);

responsive to the determination of the resource allocation associated with the policy(page 5, paragraph[0068], lines 3-6; page 5, paragraph[0068], lines 12-13), means for allocating a portion of the resources to the application based on the resource allocation associated with the policy(Page 6, Paragraph [0078], lines 5-9);

wherein each of the applications is associated with one of a plurality of customers(page 4, paragraph [0062], lines 2-4);

wherein the resource allocation program allocates the resources to the applications based upon the policy associated with the application and independent of the status of the customers associated with the applications(Page 3, paragraph [0033], lines 1-4).

74. Naik did not specially teach that a consistent quality of service is achieved for substantially all of the applications associated with each policy.

75. However, Chang teaches that a consistent quality of service is achieved for substantially all of the applications associated with each policy (left col., lines 1-4; right col., lines 16-19).

76. As per claim 26, it is the program product claim of claim 6. Therefore, it is rejected for the same reason as claim 6 above.

77. As per claims 28-32, they are the apparatus claims of claims 8-12 respectively.

Therefore, they are rejected for the same reason as claim 8-12 above.

78. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Naik et Al. (Naik) (US 2006/0294238 A1), in view of Terje K. Backman et Al. (Terje) (US 7,137,119 B1).

79. As per claim 7, Naik did not teach that the resource allocation program waits until the amount of resource defined in the resource allocation table are available, and then the resource allocation program allocates the entire amount of resources defined in the resource allocation table for the policy to the application.

80. However, Terje teaches that the resource allocation program waits until the amount of resources defined in the resource allocation table are available, and then the resource allocation program allocates the entire amount of resources defined in the resource allocation table for the policy to the application (Col. 10, lines 42-46).

81. It would be obvious to one of an ordinary skill in the art at the time the invention was made to have combined the teaching of Naik and Terje because Terje 's



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teaching improve resource management and the quality of service throughout the network.

82. Claims 19 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naik et Al. (Naik) (US 2006/0294238 A1), in view of Chang Ho Choi et Al. (Chang) ("Adaptive bandwidth reservation mechanism using mobility probability in mobile multimedia computing environment", 2000, pages 76-85), and further in view of Terje K. Backman et Al. (Terje) (US 7,137,119 B1).

83. As per claim 19, Naik and Chang did not teach that the resource allocation program waits until the amount of resource defined in the resource allocation table are available, and then the resource allocation program allocates the entire amount of resources defined in the resource allocation table for the policy to the application.

84. However, Terje teaches that the resource allocation program (Resource manager) waits until the amount of resources defined in the resource allocation table are available, and then the resource allocation program allocates the entire amount of resources defined in the resource allocation table for the policy to the application. (Column 10, lines 42-46).

85. It would be obvious to one of an ordinary skill in the art at the time the invention was made to have combined the teaching of Naik, Chang and Terje because Terje 's teaching improve the efficiency of resource management and the quality of service throughout the network.

86. As per claim 27, it is the apparatus claim of claim 7. Therefore, it is rejected for the same reason as claim 7 above.

### ***Conclusion***

87. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Vegesna (IP quality service, Cisco, 2001, chapter1, pages 1-5) teaches levels of QOS.

Verma et al. (Simplifying network administration using policy-based management) teaches a policy management tool for the network.

88. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Caroline Arcos whose telephone number is 571-

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270-3151. The examiner can normally be reached on Monday-Thursday 7:30 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

89. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Caroline Arcos

Patent examiner

  
**MENG-AL T. AN**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2100**